

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) Apparatus for editing video/audio data in which image and sound data are multiplexed, comprising:

means for designating a range of the video/audio data to be an editing object by using a deletion start frame and deletion end frame thereof; [[and]]

editing control means for rewriting a header of video data in the designated range to constitute nullified data and for rewriting a header of audio data including the same synchronous reproduction time in the designated range to constitute the nullified data; and

editing position extraction means for extracting a format change part of the audio data in the video/audio data which is the editing object to provide a range of the video data including the same reproduction time as that in the format change part as the deletion start frame and the deletion end frame.

2. (previously presented) The apparatus according to claim 1, wherein said editing control means rewrites an ID of the header of the video data and audio data in the designated range with a padding stream ID to constitute the nullified data.

3. (previously presented) The apparatus according to claim 1, wherein said editing control means re-encodes a frame next to the deletion end frame of the video data as a frame which does not require information of another frame in extension to nullify the video data to the deletion end frame from the deletion start frame, when the next frame is a frame which requires the information of another frame in the extension.

4. (previously presented) The apparatus according to claim 1, wherein said editing control means removes the nullified video/audio data part and writes the video/audio data into a writable recording medium, when duplicating the edited video/audio data in the recording medium.

5. (previously presented) The apparatus according to claim 4, wherein said editing control means judges the nullified video/audio data part based on a stream ID of the video/audio data to remove the nullified video/audio data part, and writes the video/audio data in the writable recording medium, when duplicating the edited video/audio data in the recording medium.

6. (previously presented) The apparatus according to claim 4, wherein said editing control means acquires a reproduction time of the video data before/after the nullified video/audio data part, obtains a difference between the reproduction time before the nullified video/audio data part and that after the nullified video/audio data part, which is an offset value, uses the offset value to correct the reproduction

time of the video/audio data of and after the nullified video/audio data part, and writes the video/audio data in the recording medium.

7. (previously presented) The apparatus according to claim 4, wherein said editing control means acquires a reproduction time of the video data before/after the nullified video/audio data part, obtains a difference between the reproduction time before the nullified video/audio data part and that after the nullified video/audio data part, which is an offset value, and uses the offset value to correct the reproduction time of the video/audio data of and after the nullified video/audio data part in a nullification process of the video/audio data.

8. (previously presented) The apparatus according to claim 4, wherein said editing control means rewrites the header of video data and the audio data in the designated range, using a private header indicating a data size to be nullified, to constitute the nullified data, and skips reading the nullified video/audio data part, referring to the data size of the private header, to write the video/audio data in the recording medium, when duplicating the edited video/audio data into the writable recording medium.

9. (canceled)

10. (previously presented) The apparatus according to claim 1, wherein

said video/audio data is MPEG data, and

said editing control means rewrites packet headers of said video data and said audio data to constitute the nullified data.

11. (previously presented) The apparatus according to claim 10, wherein said editing control means re-encodes the frame next to the deletion end frame of the video data as an I frame to nullify the video data including the deletion start frame to the deletion end frame, when the next frame is not the I frame.

12. (currently amended) A method of editing video/audio data in which image and sound data are multiplexed, comprising the steps of:

designating a range of the video/audio data to be an editing object by using a deletion start frame and deletion end frame thereof; [[and]]

rewriting a header of video data in the designated range to constitute nullified data and rewriting a header of audio data including the same synchronous reproduction time in the designated range to constitute the nullified data; and

extracting a format change part of the audio data in the video/audio data which is the editing object to provide a range of the video data including the same reproduction time as that in the format change part as the deletion start frame and the deletion end frame.

13. (original) The method according to claim 12, wherein said rewriting step comprises the step of rewriting an ID of the header of the video data and audio data in the designated range with a padding stream ID to constitute the nullified data.

14. (original) The method according to claim 12, wherein said rewriting step comprises the step of re-encoding a frame next to the deletion end frame of the video data as a frame which does not require information of another frame in extension to nullify the video data to the deletion end frame from the deletion start frame, when the next frame is a frame which requires the information of another frame in the extension.

15. (original) The method according to claim 12, wherein said rewriting step comprises the steps of

removing the nullified video/audio data part, when duplicating the edited video/audio data in the recording medium and

writing the video/audio data into a writable recording medium.

16. (previously presented) The method according to claim 15, wherein said rewriting step further comprises the steps of

judging the nullified video/audio data part based on a stream ID of the video/audio data to remove the nullified video/audio data part, when duplicating the edited video/audio data in the recording medium and

writing the video/audio data in the writable recording medium.

17. (original) The method according to claim 15, wherein said rewriting step further comprises the steps of

acquiring a reproduction time of the video data before/after the nullified video/audio data part,

obtaining a difference between the reproduction time before the nullified video/audio data part and that after the nullified video/audio data part, which is an offset value, using the offset value to correct the reproduction time of the video/audio data of and after the nullified video/audio data part, and

writing the video/audio data in the recording medium.

18. (original) The method according to claim 15, wherein said rewriting step further comprises the steps of

acquiring a reproduction time of the video data before/after the nullified video/audio data part,

obtaining a difference between the reproduction time before the nullified video/audio data part and that after the nullified video/audio data part, which is an offset value, and

using the offset value to correct the reproduction time of the video/audio data of and after the nullified video/audio data part in a nullification process of the video/audio data.

19. (original) The method according to claim 15, wherein said rewriting step further comprises the steps of

rewriting the header of the video data and the audio data in the designated range, using a private header indicating a data size to be nullified, to constitute the nullified data, and

skipping reading the nullified video/audio data part, referring to the data size of the private header, to write the video/audio data in the recording medium, when duplicating the edited video/audio data into the writable recording medium.

20. (canceled)

21. (original) The method according to claim 12, wherein

said video/audio data is MPEG data, and

said rewriting step comprises the step of rewriting packet headers of said video data and said audio data to constitute the nullified data.

22. (original) The method according to claim 21, wherein said rewriting step comprises the step of re-encoding the frame next to the deletion end frame of the video data as an I frame to nullify the video data including the deletion start frame to the deletion end frame, when the next frame is not the I frame.

23. (previously presented) A computer program, encoded in a computer-readable medium, for enabling a computer to execute a method of editing video/audio data in which image and sound data are multiplexed, the method comprising the steps of:

designating a range of the video/audio data to be an editing object by using a deletion start frame and deletion end frame thereof; and

rewriting a header of video data in the designated range to constitute nullified data and rewriting a header of audio data including the same synchronous reproduction time in the designated range to constitute the nullified data.